CLAIMS:

1. A method for treating arthritis comprising delivering to a subject a therapeutic gene using a lentiviral gene delivery vector such that the gene is expressed at sufficient levels and for a sufficient period to treat the subject.

2. The method of claim 1, wherein the lentiviral vector is selected from the group consisting of HIV, FIV, SIV, BIV, EIAV vectors.

3. The method of claim 1, wherein the therapeutic gene is selected from the group consisting of soluble Interleukin-1α Receptor Type I, Soluble Interleukin-1α Receptor Type II, Interleukin –1α Receptor Antagonist Protein (IRAP), Insulin-Like Growth Factor (IGF), Tissue Inhibitors of Matrix Metallo-Proteinases (TIMP) –1,-2,-3,-4, Bone Morphogenic Protein (BMP)-2 and –7, Indian Hedgehog, Sox-9, Interleukin-4, Transforming Growth Factor (TGF) –β, Superficial Zone Protein, Cartilage Growth and Differentiation Factors (CGDF), Bcl-2, Soluble Tumor Necrosis Factor (TNF) – α Receptor, Fibronectin and/or Fibronectin Fragments, Leukemia Inhibitory Factor (LIF), LIF binding protein (LBP), Interleukin-4, Interleukin-10, Interleukin-11, Interleukin-13, Hyaluronan Synthase, soluble TNF-α receptors 55 and 75, Insulin Growth Factor (IGF)-1, activators of plasminogen, urokinase plasminogen activator (uPA), parathyroid hormone-related protein (PTHrP), and platelet derived growth factor (PDGF)-AA –AB or -BB

4. The method of claim 1, wherein the lentiviral vector is injected directly into an affected joint of the subject.

5. A method for treating arthritis comprising transfecting cells *ex vivo* with a therapeutic gene using a lentiviral gene delivery vector and administering the cells to a subject.

6. The method of claim 5, wherein the lentiviral vector is selected from the group consisting of HIV, FIV, SIV, BIV, and EIAV vectors.

7. The method of claim 5, wherein the therapeutic gene is selected from the group consisting of soluble Interleukin-1α Receptor Type I, Soluble Interleukin-1α Receptor Type II, Interleukin –1α Receptor Antagonist Protein (IRAP), Insulin-Like Growth Factor (IGF), Tissue Inhibitors of Matrix Metallo-Proteinases (TIMP) –1,-2,-3,-4, Bone Morphogenic Protein (BMP)-2 and –7, Indian Hedgehog, Sox-9, Interleukin-4, Transforming Growth Factor (TGF) –β, Superficial Zone Protein, Cartilage Growth and Differentiation Factors (CGDF), Bcl-2, Soluble Tumor Necrosis Factor (TNF)– α Receptor, Fibronectin and/or Fibronectin Fragments, Leukemia Inhibitory Factor (LIF), LIF binding protein (LBP), Interleukin-4, Interleukin-10, Interleukin-11, Interleukin-13, Hyaluronan Synthase, soluble TNF-α receptors 55 and 75, Insulin Growth Factor (IGF)-1, activators of plasminogen, urokinase plasminogen activator (uPA), parathyroid hormone-related protein (PTHrP), and platelet derived growth factor (PDGF)-AA –AB or -BB

8. The method of claim 5, wherein the cells are autologous.

9. The method of claim 8, wherein the cells are bone marrow cells.

10. The method of claim 8, wherein the cells are mesenchymal stem cells obtained from adipose tissue.

11. The method of claim 8, wherein the cells are synovial fibroblasts or chondrocytes

12. The method of claim 5, wherein the cells are non-autologous (allogeneic or xenogenic).

13. The method of claim 12, wherein the cells are a cell line or primary cells derived from a human or animal source.